# SN-95 IRS 13-14 GT500 rear rotor adapter

#### Notes

- This kit is designed and tested for SN-95 Mustangs with IRS.
- Check <u>SN-95 Mustang Brake Bias Calculator (lawpaul.github.io)</u> to see how installing this rear rotor adapter will affect the brake bias on your Mustang.
- I shall not be held liable for this kit's installation or post-installation performance.
- The included 6061-T6 aluminum brackets have been confirmed to withstand the loads from braking using FEM.
- The included 10.9 hardware matches the OEM specification.
- Brakes are important. Please confirm your calipers are functioning properly and everything is tightened appropriately.
- Diagrams taken from the 2003 Mustang Workshop Manual.

### Kit Contents

- 1 Driver-side adapter bracket
- 1 Passenger-side adapter bracket
- 2 M12 bolt
- 2 M12 nut

#### Parts Needed

- 1 pair 13-14 GT500 rear rotors
- 1 set 03-04 Cobra rear brake pads

# Tools Needed

- Torque wrench
- 8mm socket
- 12mm socket
- 15mm socket
- 16mm socket
- 18mm socket
- 13/16" socket (wheel removal)
- Needle nose pliers
- Jack
- Jack stands
- Rear caliper compression tool (many auto parts stores offer free rental)
- Blue thread locker
- Zip ties

## Removal

- 1. On a flat surface, raise vehicle on jack stands. If only lifting the rear, chock the front tires so the car cannot roll.
- 2. With the parking brake applied, remove the rear wheels.
- 3. Disengage the parking brake.
- 4. Remove the bolt attaching the parking brake cable to the lower control arm.



5. Using needle nose pliers, disengage the parking brake cable end from the parking brake lever arm.





6. **CAUTION: Do not allow the rear disc brake caliper to hand from the rear wheel brake hose.** Remove the rear disc brake caliper bolts and position the caliper aside.



7. Remove the brake pads.



8. Remove the rear disc support bracket bolts and bracket.



## Installation

1. Compress the rear disc brake piston and adjuster into rear disc brake caliper using rear caliper compression tool. Ensure the notch in the piston is vertical to match the pin on the brake pads.



2. Install the adapter bracket onto the spindle using the included M12 nuts and bolts. The correct orientation is with the flat side outboard and the bracket angled upward. Use blue thread locker

and torque the nuts to 76 lb-ft.



3. Install the 13-14 GT500 rear rotor on the spindle. A lug nut can be used to hold it in place.



4. Install the brake caliper support bracket onto the adapter bracket using the factory M12 caliper bolts. Use blue thread locker and torque the bolts to 76 lb-ft.



5. Ensure the caliper support bracket clears the rotor on all sides. The adapter bracket keeps the geometry between the caliper support bracket and the rotor the same as stock, but the 13-14 GT500 rotor is 1mm thicker than stock.

6. Install the new slipper and brake pads.



7. Position the caliper on the anchor plate and install the bolts.



8. Bolt the caliper to the support bracket. Use blue thread locker and tighten to specification. Note: as the 13-14 GT500 rotor is 1mm thicker, it may be necessary to remove the insulators from the back of the pads to gain more clearance. Start with the inboard pad; remove the outboard insulator if necessary. Removing the insulator is not a concern; Ford ran in production for a while with no insulators on the pads



9. Ensure the rotor spins freely and the pads are not dragging. If the pads are dragging, remove an insulator.

10. Ensure the parking brake cable is routed above the lower mounting bolt.



11. Attach the parking brake cable end to the parking brake lever arm.





12. Attach the parking brake cable to the lower control arm. It may be possible to slide the bracket down the cable and attach using the bracket. One of the bracket bolts broke on my car 8 years ago and I have used a zip tie to attach the cable since then.



13. Confirm parking brake functionality. The parking brake lever may need to be pulled and released a few times to rachet the caliper pistons to a tight position after compressing the piston.

14. Position the wheel and install the wheel nuts hand tight. With the parking brake applied, tighten the wheel nuts to specification in a star-pattern sequence.

